June 19, 2000
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The Honorable Illinois General Assembly
State Capitol
Springfield, Illinois

Dear Members of the Illinois General Assembly:

We are pleased to submit to you the Illinois Commerce Commission's "Report to the General Assembly on Experimental Programs Initiated by Electric Utilities." The report covers the period December 16th, 1997 through December 31, 1999.

This report is submitted in compliance with Section 16-106 of the Electric Customer Choice and Rate Relief Law of 1997.

Sincerely

Richard L. Mathias, Chairman

cc: Illinois State Library

Illinois Commerce Commission Report to the General Assembly: Experimental Programs Initiated by Electric Utilities Under Section 16-106 of the Electric Service Customer Choice and Rate Relief Law of 1997

The Illinois Commerce Commission

June 2000

Executive Summary

The Illinois Commerce Commission ("Commission") hereby submits its second Report to the General Assembly regarding the experimental programs implemented by electric utilities pursuant to Section 16-106 of the Electric Service Customer Choice and Rate Relief Law of 1997, 220 ILCS 5/16-106 ("Customer Choice Law"). The Report is submitted in response to the directive in Section 16-106 that the Commission "review and report annually the progress, participation and effects of such experiments to the General Assembly." The Commission's first report reviewing Section 16-106 programs was submitted in January 1999. In that report, the Commission discussed the programs initiated by Commonwealth Edison Company ("ComEd") and Illinois Power Company during 1997 and 1998.

During 1999, AmerenCIPS initiated one program and AmerenUE initiated two programs under Section 16-106. ComEd continued into 1999 three Section 16-106 programs that it implemented during 1997-98, and also initiated one new program.

The following table provides general information about the Section 16-106 programs that were in operation during 1999:

Table 1: 1999 Experimental Programs Implemented Under Section 16-106 of the Public Utilities Act

Program	Electric Utility	Eligible Customers	Participation
Consolidated Billing Experiment	ComEd	Retail businesses and schools	1,017 multi-site retail trade establishments (through November 1999) and 228 school district sites
Affinity Group Billing Experiment	ComEd	Illinois Retail Merchants Association members	859 customers with a total of 4,718 premises
Student Power 2000 Pricing Experiment	ComEd	Public and private grade K-12 schools in ComEd service area	1,513 grade K-12 schools
1999 Load Curtailment and Generated Energy Procurement Pricing Experiment	ComEd	Three groups of non-residential customers	Total of 1,545 participants for the three groups
Voluntary Curtailment Billing Experiment	AmerenCIPS/ AmerenUE	Large non-residential customers	A total of 30 customers enrolled in the programs
Pay As You Go Billing Program	AmerenUE	Low-income customers in the East St. Louis Metro area	100 LIHEAP customers selected for program.

The Commission has concluded the following about the programs implemented under Section 16-106 during 1999 by AmerenCIPS, AmerenUE and ComEd:

- Two types of programs have been implemented: programs targeted at selected customer groups and programs initiated in response to potential summer reliability concerns.
- ComEd's expenditures during 1999 associated with its experimental programs are approximately $37.8 million. ComEd has forgone approximately $75.3 million in revenue (and customers have saved the same amount) due to the implementation of Section 16-106 programs during 1997-99.
- The total administrative expenditures (excluding direct customer payments for participation) associated with the load curtailment programs implemented by AmerenCIPS and AmerenUE are less than $100,000. The budgeted expenditures over the two-year life of the Pay As You Go Program are about $250,000.
- There should be no direct impact of the experimental programs on the rates of customers not participating in the programs because the Commission is required to exclude the costs and revenues associated with Section 16-106 programs when setting electric rates.
- Some of the customers eligible for the programs became eligible for customer choice on October 1, 1999. Thus, the participation rate for some of the programs has begun to decline as customers have chosen new electric suppliers.
- For some of the ComEd programs, the value of the information obtained from the programs obtained is lower than the costs associated with the programs.
- Customers in retail businesses who do not obtain the discounts associated with some of the experimental programs could face a competitive disadvantage relative to the customers who receive the discounts; this advantage will persist until December 31, 2006, the date at which utilities may cease the imposition of transition charges upon customers who choose alternative suppliers.

Section 16-106 states that the Commission may offer recommendations for changes to the experimental programs. The Commission offers the following recommendation:

The General Assembly should consider requiring utilities that offer Section 16-106 programs to customers or customer classes eligible for "delivery services," to provide the transmission and distribution portion of such programs under the same terms, conditions and rates as the applicable delivery services tariff.

The Commission believes that the pricing flexibility offered by Section 16-106 may provide incumbent utilities the opportunity to discriminate in the provision of regulated monopoly services, such as transmission and distribution services, by discounting prices or providing those services under terms and conditions that unduly discriminate against alternative suppliers and their customers taking delivery services.

The Commission specifically notes that this recommendation applies solely to programs under Section 16-106 as currently understood by the Commission and must not be interpreted to reflect any determination by the Commission about its authority to require a utility to provide bundled energy services to its own customers using the applicable delivery services tariffs.

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I. Introduction

The "Electric Service Customer Choice and Rate Relief Law of 1997" ("Customer Choice Law"), enacted into law on December 17, 1997, made a number of significant changes to the Public Utilities Act ("Act"). Among the changes is new Section 16-106, which permits electric utilities to offer experimental programs at their discretion to a selected group of customers. According to Section 16-106, the programs offered under this section of the Act may include experiments for the "provision or billing of services on a consolidated or aggregated basis, as well as other experimental programs."

Section 16-106 requires the Commission to report annually to the General Assembly describing the Commission's evaluation of the "progress, participation and effects" of these programs. This is the Commission's second report to the General Assembly concerning Section 16-106 programs. The Commission's initial report was submitted to the General Assembly in January 1999.

To date, four electric utilities, AmerenCIPS, AmerenUE, ComEd, and Illinois Power Company, have undertaken experimental programs filed with the Commission pursuant to Section 16-106. Three of the programs initiated by ComEd during 1997-98 were continued into 1999. ComEd initiated a new program during 1999, bringing to six the total number of programs that have been offered by ComEd under Section 16-106 since the Customer Choice Law was enacted. The programs initiated by Illinois Power Company during 1998 terminated during that year.[1]

ComEd describes two of the four programs that were in effect during 1999 as billing programs (the Consolidated Billing Experiment and the Affinity Group Experiment). Its other two 1999 programs are pricing programs (the Student Power 2000 Power Pricing Experiment and the 1999 Load Curtailment and Generated Energy Procurement Pricing Experiment).

ComEd's billing programs were initiated soon after the Customer Choice Law became effective. These ongoing programs have the general purpose of assisting ComEd and certain customer groups in making a smooth transition to competitive electric markets.

The Student Power 2000 Power Pricing Experiment is intended to inform schoolchildren about the energy choices they will make as adults. ComEd believes that this program will help it to gain insight into the value of educating customers about energy issues. The program has an anticipated three-year duration.

The load curtailment program in effect is a successor to the two load curtailment program that were in effect during 1998. Those load programs were created in

[1] Illinois Power's 1998 Section 16-106 programs are not described in this Report.

response to the unprecedented increases in wholesale electricity prices during June of that year. The purpose of the load programs is to gather information to assess customers' capability and willingness to respond to market-based price signals to curtail usage during peak load periods.

During 1998-99, customers have realized approximately $75.4 million in savings due to their participation in ComEd's programs.

The pricing programs initiated by the Ameren companies are similar to the two load curtailment programs implemented by ComEd. AmerenUE's "Pay As You Go Program" is designed to evaluate low-income customers' response to an innovative bill payment option.

As required by Section 16-106, ComEd and Ameren filed notices with the Commission containing statements describing each of the programs. The notices generally included the following information: effective program dates; program availability; general program purpose and objectives; and, participation incentives (e.g., rate discounts), if any. The letters sent to the Commission accompanying each notice generally reflected the Companies' interpretation of Section 16-106 that an experimental program becomes effective upon the filing of the notice.

The balance of this Report describes in more detail the seven programs filed under Section 16-106 that were in effect during 1999. As required by Section 16-106, the Report also describes the Commission's assessment of the "progress, participation and effects" of each of the programs. After each program description, a table is presented showing summary information about the program. In the Conclusion of the Report, the Commission offers general comments about issues related to Section 16-106 experimental programs.

II. Section 16-106 of the Public Utilities Act

The authority provided electric utilities to offer certain types of experimental programs is stated in Section 16-106 as follows:

> Sec. 16-106. Billing experiments. During the mandatory transition period,[2] an electric utility may **at its discretion** conduct one or more experiments….(emphasis supplied)

Section 16-106 states that electric utilities may choose which customers are eligible for billing experiments (and, of course, which are not eligible), and that the Commission should allow the experiments to proceed: [3]

[2]Section 16-102 states that the "mandatory transition period" will end on January 1, 2005.

> The offering of such a program by an electric utility to retail customers participating in the program, and the participation by those customers in the program, shall not create any right in any other retail customer or group of customers to participate in the same or a similar program. The Commission shall allow such experiments to go into effect upon the filing by the electric utility of a statement describing the program.…

Section 16-106 makes clear, however, that the Commission retains its authority to approve experimental programs submitted to the Commission for approval under Sections of the Act other than Section 16-106:[4]

> Nothing contained in this Section shall be deemed to prohibit the electric utility from offering, or the Commission from approving, experimental rates, tariffs and services in addition to those allowed under this Section.

It thus appears that one effect of Section 16-106 is to provide electric utilities that desire to implement experimental programs with a choice. Utilities may either (1) submit the program to the Commission for approval in the traditional manner; or, (2) implement a qualifying program as a billing experiment pursuant to Section 16-106.

Section 16-106 lists the types of billing experiments that may be offered by electric utilities. The experiments may include those

> …for the provision or billing of services on a consolidated or aggregated basis, for the provision of real-time pricing, or other billing or pricing experiments, and may include experimental programs offered to groups of retail customers possessing common attributes as defined by the electric utility, such as the members of an organization that was established to serve a well-defined industry group, companies having multiple sites, or closely-located or affiliated buildings, provided that such groups exist for a purpose other than obtaining energy services and have been in existence for at least 10 years.

The Commission must inform the General Assembly about the experiments filed under Section 16-106:

> The Commission shall review and report annually the progress, participation and effects of such experiments to the General Assembly. Based

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[3] The Commission has not undertaken any formal investigation to determine whether any of the experimental programs are consistent with Section 16-106.

[4] No experimental programs have been brought by electric utilities to the Commission for approval since the enactment of the Customer Choice Law.

upon its review, recommendations for modification of such experiments may be made by the Commission to the Illinois General Assembly.

III. Section 16-106 Programs Offered by ComEd During 1999

This Section of the Report provides information about the four ComEd experimental programs that were in effect during 1999.

A. Consolidated Billing Experiment

1. Program Summary

On December 30, 1997, shortly after the Customer Choice Law became effective, ComEd submitted a notice to the Commission describing the Company's implementation of the Consolidated Billing Experiment. The Consolidated Billing Experiment is effectively a continuation, under Section 16-106, of a Commission-approved program implemented by ComEd in 1996 called Rider CB that was terminated upon the inception of the Consolidated Billing Experiment. The customers who were taking service under Rider CB transferred to service under the Consolidated Billing Experiment.

ComEd stated in its 1997 filed statement that the program is designed to assist ComEd in developing systems and technologies that will allow for measuring and billing aggregated loads. An additional purpose is to gain experience with Automatic Meter Reading ("AMR") technologies. According to the filing, ComEd believed that these technologies would benefit customers in three ways: First, by facilitating the distribution of power and energy sold to customers by alternative suppliers; second, by allowing ComEd to "treat a customer with many geographically dispersed locations as a single customer"; and, finally, ComEd anticipated that the program would have the ancillary benefit of encouraging improved energy management by participating customers. Through the design of the rates for service, customers could reduce their electric bills by decreasing their demand on ComEd's system during certain periods.

As noted above, the experimental program is offered to the same customers who were eligible for Rider CB. Customers eligible for the Consolidated Billing Experiment are two customer subclasses within the commercial customer class. Specifically, eligible customers include businesses in retail trade that have at least five premises and a demand of at least 25 kilowatts ("kW"), with a total demand of 10 megawatts ("MW") to be served under the program. School districts with at least three premises that have at least 25 kW of demand with a total demand of at least 3 MW that would be served under the program are also eligible. Participation in the experiment is voluntary.

Participating customers will have saved about 5% on their electric costs. Originally, a customer's bill was based on two demand charges. One of the demand charges was based on the number of kilowatts supplied at each of the customer's premises at the time of the highest coincident demand at all of the customer's premises. The other demand charge was based on the maximum demand at each of the customer's premises.

On December 3, 1999, ComEd filed a Revised Consolidated Billing Experiment. In the filing, ComEd noted that many customers participating in the original experiment had used the knowledge gained from aggregating their load under the experiment to shop for and purchase energy as a group. ComEd anticipated that by the end of the first quarter of 2000 most customers participating in the experiment would have switched to delivery services. Therefore, ComEd decided to close the experiment to new customers and to terminate the experiment for existing participants as of June 30, 2001.

In the filing, ComEd also revised the method for calculating the demand charges. With the few remaining participants, the cost to provide coincident demand billing in the manner set out in the original experiment could no longer be justified. Therefore, the company decided to use a calculated Coincident Demand Charge based upon each participant's billing history. The second demand charge, the Maximum Demand Charge, continued to be calculated as set out in the original experiment.

2. Program Progress, Participation and Effects

The results of this program indicate that the program was well-received by both groups of eligible customers. Retail trade establishments had a higher participation rate than the school districts.

In its Report to the Commission filed August 3, 1999, ComEd stated that the primary reason that motivated customers to participate in the program was to save money on their electric bills. A secondary reason was for the convenience of receiving a single bill that consolidates the bills for each of the customers' individual premises.

ComEd also stated that that few participating customers have attempted to reduce their coincident demands, which could generate additional customer savings. This finding indicated that many customers do not make the effort required by consolidated billing programs to realize the maximum achievable savings on their electric bills when given an opportunity to do so.

The majority of the problems encountered and costs incurred by participating customers were associated with the installation and servicing of telephones needed for the AMR meters used in the program. ComEd stated that labor and material costs for the installation of landline telephones ranged from $150 to $400 per meter, although customers may use a cellular-based telephone. Customers that use a landline-based telephone must also pay the local telephone company about $15 per month per landline installation for phone service. Additionally, customers must rent an AMR meter, at cost of $20.05 or $39.05, depending on whether the customer has a landline-based or cellular-based telephone installation.

In its assessment of the program, ComEd stated that, while participation is high, and customers are saving about 5% to 7.5% on their electric bills, it found that some customers have had “difficulties” with the experiment, particularly with the installation and cost of the landline telephones that are used with the AMR equipment. For its part, ComEd stated that it has gained expertise with the integration of metering, communications, and billing technologies used in the experiment. ComEd has also obtained hourly load data from premises of varying sizes that it might not have otherwise collected. ComEd also stated that its experience with the Consolidated Billing Experiment has assisted in the implementation of open access in Illinois.

ComEd reports that it has encountered problems related to meter installation and meter reading, as well as data transfer and processing problems in the billing systems used in the experiment. This resulted in some participants experiencing delays in receiving their electric bills. The implementation of ComEd’s new billing system has also resulted in new billing problems. However, ComEd believes that these problems have been eliminated by the revisions it made to the experiment in its December 30, 1999 filing.

ComEd stated that there have been no adverse effects on reliability due to the program.

In the thirty-nine months since the inception of Rider CB program / Consolidated Billing Experiment, ComEd has incurred a revenue shortfall (i.e., the revenue lost due to the discounted rates) of about $31.4 million and incurred additional costs of $3.0 million for billing, programming and meters. The revenue shortfall in the two years the Consolidated Billing program has been in effect is about $21.1 million.

ComEd reported that a significant number of Consolidated Billing program customers have chosen to terminate their participation in the program to purchase electricity from alternative suppliers.

In 1996, the Commission undertook an investigation of the Rider CB program after it had been in effect for a few months. In the course of its investigation, the Commission posed several questions to ComEd, among which were questions relating to whether Rider CB is an “experiment” and whether Rider CB would elicit information of value to ComEd and to future open access customers. After hearing evidence from several parties about these questions, the Commission found that ComEd’s responses to the questions were satisfactory. In particular, the Commission found that "Rider CB is a lawful experimental billing program."[5]

As a result of the discounts provided to participating customers, the transition charges that participating customers who switch electric suppliers would pay will be lower than the transition charges that non-participating customers who switch suppliers would pay. The difference in transition charge payments paid by participating customers and non-participating customers is equal to the amount of the discount program customers can obtain through their participation in the programs. Even though customers may end their participation in either of the programs (or the programs may terminate by the end of 2006),[6] program participants will still receive a discount on their total electric bills through the end of the transition charge-payment period that probably will not be obtained by non-participants.

Table 2: Consolidated Billing Experiment

CONSOLIDATED BILLING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Consolidated Billing (replaced Rider CB) ; began 12/30/97, no ending date stated in filing.	Experiment with the billing and metering systems for customers under common ownership.	Businesses in retail trade with at least five premises and 25 kW demand, with a total demand of 10 MW; School districts with at least three premises and 25 kW of demand, with a total demand of at least 3 MW. Participants are expected to save about 5% on electric bills.	Participation during 1999 from a total of 1,017 (through November 1999) multi-site retail trade establishments and 228 school district sites.[7] Customer bill savings average about 5% to 7.5%. Customer savings / ComEd unrecovered charges of $20.9 million since the inception of the program in December 1997.

B. Affinity Group Billing Experiment

1. Program Summary

ComEd filed a notice with the Commission on December 31, 1997, describing the Affinity Group Billing Experiment. The program is available to members of the Illinois Retail Merchants Association ("IRMA") only. According to the filing, as an incentive

[5] Commission Order, Docket 96-0485, p. 34.
[6] ComEd has notified the Commission that this program will terminate in July 2001.
[7] One eligible school district is taking service under Rider GCB - Governmental Consolidated Billing, which, under Section 16-125A of the Act, ComEd is required to offer.

for participation, customers will receive a reduction in demand charges, which is expected to result in average annual electric savings of about 15%. Additionally, ComEd expects that the program will help IRMA and its members with preparation for the transition to competitive electric markets. ComEd anticipates that it will offer the program for an initial three-year term, unless the program length is changed upon agreement by the parties.

ComEd's notice states that the program has several objectives: to learn about the potential for aggregating the electric loads of related and unrelated companies; to gather information that will assist program participants to make informed decisions about the procurement of the participants' electric supply; to identify energy efficiency measures for program participants; and, to analyze the value of the energy efficiency measures' usefulness in helping ComEd reduce customer load during periods of system emergencies. ComEd notice also states that the IRMA membership, which includes both large and small single- and multiple-site companies, is well-suited for "exploring these objectives." Additionally, IRMA members will assist ComEd in understanding the needs of commercial customers in making the transition to competitive electric markets.

2. Program Progress, Participation and Effects

ComEd supplied data to the Commission that indicates that that over half of the eligible customers participated in the program. The data in the Report indicate that most of the majority of the eligible customers declining to participate in the program are single-site customers. Other than those exiting the program to switch to delivery services, none of the participants has dropped out of the program. In a report to the Commission, ComEd stated that the primary reason why customers are participating in the program is to reduce electric costs.

ComEd has spent about $37.8 million through the first two years of the program.

ComEd learned that there are three main reasons why eligible customers did not participate in the program. The single most important factor was the closure of many small businesses. Second, some potential participants believed that their low level of expenditures on electricity did not justify the level of effort required to save on electricity costs. Third, some customers were apparently wary of unspecified "undesirable consequences" if they participated in the program.

ComEd states that it believes that the program has made a contribution to reliability, as program participants were asked three times during 1999 to reduce their energy usage. Program participants responded by curtailing their electric demand by about a maximum of about 20 MW during the three periods. IRMA has also assisted ComEd in educating its members about how to curtail their energy usage without disrupting the flow of business.

ComEd has not fully analyzed the data it has collected concerning changes in participants' consumption patterns, so no conclusions have been drawn with respect to consumption.

Customers receiving rate discounts from participation in Section 16-106 programs typically receive a discounted electric rate. As noted in the previous section, such discounts result in transition charges that are lower for program participants than for non-participants. The difference in transition charges will last until the termination of the period in which customers must pay transition charges, which, for ComEd, is the end of 2006.

It is an open question whether the advantage is gained by program participants over non-participants is significant. As the Commission noted in last year's report, according to the Census of Retail Trade,[8] electricity costs comprise only about 3.2% of operating costs for the average retail trade establishment. This means the advantage IRMA members will have until the end of 2006 over customers not receiving a discounted electricity rate is, on average, about 0.5% (i.e., 0.032 * 0.15) of operating costs.

One of the benefits that may accrue to ComEd from this program is the information that would be of use to ComEd if its wishes to compete with other suppliers to sell electricity to commercial customers. Since such marketing information is valuable and difficult and costly to obtain, possession of this information could give ComEd an advantage over other suppliers in the future. This advantage would not be sufficient, however, to deter determined competitors from entering the Illinois market.

ComEd has nearly 300,000 commercial customers, the vast majority of whom are not eligible for the Affinity program. The Commission notes that the choice of customers for this program, while apparently permitted by Section 16-106, certainly creates the appearance of ComEd showing favoritism to a selected customer group.

[8] Table 8, Census of Retail Trade, Bureau of the Census, U.S. Department of Commerce, 1992.

Table 3: Affinity Group Billing Experiment

AFFINITY GROUP BILLING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Billing program began 12/31/97 and has initial three year term.	Learn about load aggregation potential; develop educational material; identify energy efficiency measures.	Retail trade establishments receive approximately 15% discount on electric bills	859 customers representing a total of 4,718 premises participated in the program. Customer savings are about as projected. Customer savings / ComEd unrecovered charges of $37.9 million since the inception of the program in 1997.

C. Student Power 2000 Pricing Experiment

1. Program Summary

The Student Power 2000 Pricing Experiment is available to the estimated 4,300 public and private schools in ComEd's services territory that offer courses for grade levels kindergarten through the twelfth grade.

Schools with grade levels kindergarten through the fifth grade will conduct annual energy projects with their students. The students at schools with grade levels sixth through twelfth grade will conduct annual energy audits. With the assistance of teachers, the students at the higher-grade levels will develop energy plans to identify energy efficiency measures at the schools.

The notice filed with the Commission states that ComEd will establish an Advisory Board that will provide ComEd with insight as to how a specified market segment values energy efficiency measures. The interaction with the Advisory Board will also assist ComEd in developing new service offerings and programs.

Schools participating in the Student Power 2000 Pricing Experiment will receive a discount of 10% on their electric bills. Participating schools may also be eligible for low-interest loans to finance investments in energy efficiency projects.

The Student Power 2000 Pricing Experiment will be offered by ComEd for an initial three-year term.

2. Program Progress, Participation and Effects

Implementation of the program began with the commencement of the 1998-99 school year. A total of 1,531 schools have participated in the program. Sixty-two schools have cancelled their involvement with the program.

ComEd encountered difficulty in "identifying, contacting, and developing relationships with eligible customers and participants" due to the large number of school districts and individual schools that are participating in the program.

ComEd has not made a measurement with respect to charges to the schools' usage as are a result of their participation in the program.

There are limited potential competitive effects of this program. Obviously, grade schools do not compete against each other, as other commercial customers do. However, the schools participating in the program will be eligible in the near future to purchase electricity from new suppliers. Through this program, ComEd will obtain information that will be useful to ComEd as it competes with other suppliers to sell electricity to the school districts.

Table 4: Student Power 2000 Pricing Experiment

STUDENT POWER 2000 PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Pricing program began 1/30/98, and has expected three-year duration.	To learn about schools' abilities to implement energy efficiency improvements.	School districts are eligible. Participants are expected to save about 10% on their electric bills.	1,531 schools have participated in the program. Customer savings / ComEd unrecovered charges of $10.4. million since inception of the program.

D. 1999 Load Curtailment and Generated Energy Procurement Pricing Experiment

1. Program Summary

On March, 24, 1999, ComEd filed a statement with the Commission describing its plans to offer a load curtailment program ("The 1999 Load Curtailment and Generated

Energy Procurement Pricing Experiment"). This program is a successor to one of the load curtailments program offered by ComEd in 1998.

Like the 1998 program, the 1999 program consists of a load curtailment program and a lighting efficiency program. Under the load curtailment portion of the program, customers that agree to curtail their demand by a specified amount during curtailment periods will receive a payment from ComEd. Lighting customers will receive reimbursement for the purchase of energy efficient lighting equipment.

Customers taking service under curtailment programs may be requested on short notice, usually during periods of peak demand, to curtail their load on the utility's system. Customers who participate in such programs typically receive a payment from the utility as compensation for the inconvenience of reducing their load when asked to do so.

In its statement, ComEd describes the program as an effort to determine whether customers can provide "Resources" in sufficient quantity and duration to aid in system operations." (The term "resources" refers to power and energy that is generated by the customers participating in the experiment or not consumed by load curtailment customers that is instead available for consumption by the utility's other customers). ComEd will obtain information regarding how customers with various electric demands respond to requests to curtail demand in return for the customers obtaining a credit on their electric bills.

ComEd states that one of the benefits of the program is increased choice for ComEd's customers (i.e., customers have the opportunity to make a decision as to whether the payment for interruption is greater than the value that could be obtained by consuming the electricity). ComEd's statement notes that the program has the potential to reduce peak generation, which will reduce emission of carbon dioxide and nitrous oxide.

Unlike the 1998 curtailment program, which was available to both residential and non-residential customers, the 1999 program is offered to non-residential customers only. Specifically, the customers eligible for this program are the following: (i) customers that have electric demand from 10 kW to 2,000 kW that commit to curtail the greater of at least 5% of their 1998 peak demand or 10 kW; (ii) customers that commit to provide 500 kW or more of resources; and, (iii) customers that commit 3,000 kW or more of resources. Customers taking service under existing interruptible tariffs are not eligible for the experimental program.

Payments for participating customers under the experimental program are as follows: \$1.00 per kWh reduced during curtailment periods for customers eligible under (i) above; \$1.20 per kWh reduced during curtailment periods, plus \$5.00 per kW committed for the customers eligible under (ii) above; an advance payment of \$10.00

for each kW committed, plus an amount of no less than $0.10 per kWh or 50% of a price stated in a published electricity index, whichever is greater, for the customers eligible under (iii) above.

In the lighting efficiency part of the program, ComEd will offer non-residential customers with a demand of 100 kW or greater compensation for the costs for the installation of "dimmable ballasts." ComEd explains that dimmable ballasts can reduce both lighting and cooling energy requirements. ComEd will commit up to $2.5 million for this program. If funds remain, ComEd will reimburse customers for the costs of other lighting efficiency replacements and retrofits.

The program ended on 12/31/99.

2. Program Participation, Progress and Effects

A total of 1,545 customers committed to reduce a total of 284.5 MW when curtailments were called. Three curtailments were called for the programs labeled (i) and (ii) above. Four curtailments were called for the program labeled (iii).

The Commission does not believe that this program will have any significant long-term effects on competition, primarily because the discounts on electric rates from this program will be applicable for short periods only.

Table 5: 1999 Load Curtailment and Generated Energy Procurement Pricing Experiment - Load Curtailment

1999 LOAD CURTAILMENT AND GENERATED ENERGY PROCUREMENT PRICING EXPERIMENT - LOAD CURTAILMENT (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Pricing program began 3/24/99 and ends 12/31/99.	To determine whether curtailment approach can aid in system operations	Nonresidential customers: (i) with demand between 10 kW and 2,000 kW who commit to curtail 5% of 1998 peak load or 10 kW, whichever is greater; (ii) who commit to a minimum 500 kW reduction; or (iii) who commit to a minimum reduction of 3,000 kW (large customers only). Customers receive payment for each kWh and/or kW reduced.[9]	A total of 1,545 customers committed to curtail 284.5 MW. A total of four separate curtailments were called. ComEd credited approximately $4.1 million to program participants.

[9]See text for a description of the payments.

Table 6: 1999 Load Curtailment and Generated Energy Procurement Pricing Experiment - Lighting Efficiency

1999 LOAD CURTAILMENT AND GENERATED ENERGY PROCUREMENT PRICING EXPERIMENT - LIGHTING EFFEICIECNY (COMED)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Pricing program began 3/24/99 and ended 12/31/99.	To determine whether a market can be stimulated for more efficient (but more expensive) lighting technology	Current ComEd commercial, industrial and municipal customers with 100 kW or more of electric demand. Reimbursement for certain specified lighting costs.	A total of 166 customers are participating in the program. ComEd has spent about $2.0 million on the program.

IV. Section 16-106 Programs Offered by AmerenCIPS and AmerenUE Under During 1999

This section of the Report describes the experimental programs undertaken by Ameren under Section 16-106 during 1999.

A. Voluntary Curtailment Billing Experiment (AmerenCIPS/AmerenUE)

1. Program Summary

AmerenCIPS and AmerenUE filed statements with the Commission describing the Companies' intention to implement "Voluntary Curtailment Billing Experiments." These programs are similar to the load curtailment programs that have been implemented by ComEd and Illinois Power.

Ameren states that the programs have three purposes:

- To provide Ameren with "additional flexibility in providing reliable power and energy to its native load customers during periods of power supply constraints;"
- To provide "participating customers an opportunity to realize additional benefits from operation of customer-owned generation and/or load management activities when asked to do so by Ameren"; and
- To reduce "Ameren's incremental cost of power and energy."

Ameren's statements note that customers may be asked to curtail load during periods other than at a time of system peak demand.

The programs are available to those customers with interval meters who agree to curtail an average of 1,000 kWhs per hour during the specified curtailment period. The programs are also available to multi-premises or multi-metered customers who agree to accept notification at a single location and also agree to curtail an average of 500 kWhs per hour at three or more premises or meter locations.

Potential participants must demonstrate to Ameren their ability to comply with the provisions of the experimental program. The statement filed by Ameren indicates that the Companies will use their "sole discretion" in determining which customers may participant in the programs. Customers are not required to participate in each curtailment called by Ameren, but could be terminated from the program should they repeatedly decline to curtail load when asked to do so.

Notification to customers of curtailment periods will occur either by 8:00 a.m. on the day prior to, or the morning of, the curtailment. Customers will be advised of the duration of the curtailment and the price per kWh customers will paid for the curtailment. Customers who intend to participate in a curtailment must indicate their desire to participate by 10:00 a.m. of the day the notification was given.

The statements indicate that customers will not receive a demand credit for participation. AmerenCIPS's statement indicates that participating customers may also be subject to a monthly "Meter Translation Charge" and will be charged an "Administrative Charge" for each curtailment. However, Ameren later made the decision to implement the program without applying the Administrative Charge."

2. Program Participation, Progress and Effects

Table 7: Voluntary Curtailment Billing Experiment

VOLUNTARY CURTAILMENT BILLING EXPERIMENT (AMERENCIPS AND AMERENUE)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
The AmerenCIPS billing program began March 19, 1999. The AmerenUE billing program began May 17, 1999.	To assist AmerenCIPS and AmerenUE in providing power and energy during periods of power supply constraints.	AmerenCIPS: Customers who can curtail demand by 1 MW at a single site or 500 kW at 3 or more sites. AmerenUE: Customers who can curtail demand by 1 MW at a single site	AmerenCIPS: 23 customers enrolled in program. AmerenUE: 7 customers enrolled in program. Ameren's expenditures

		Customers receive a credit for each kWh curtailed.	were less than $100,000. Variable avoided costs were $1,588 per mWh.

B. Pay As You Go Program (AmerenUE)

In January 1999, the Department of Commerce and Community Affairs (“DCCA”) solicited proposals for energy-related projects. AmerenUE submitted a proposal for the “Pay As You Go Program,” which was accepted by DCCA.

On September 10, 1999, AmerenUE filed a notice with the Commission describing its intention to implement the Pay As You Go Program. This program is designed to assist low-income customers in achieving a balance between their energy usage and the funds available to pay for that usage. AmerenUE describes the experimental program as a billing program.

AmerenUE states in its notice that low-income customers, after consuming electricity during one month, often struggle to pay their energy bills during the following month. Customers who cannot pay their bills then become subject to late fees, security deposits, and other charges that are not directly related to their electricity consumption. The goal of the Pay As You Go Program is to allow low-income customers the means to pay for their electricity usage as they consume the electricity. This is accomplished by the use of a pre-paid energy card, which is similar to a pre-paid phone card, that enables customers to determine the amount of energy that is available for consumption. The use of the Pay As You Go plan will be supplemented by case management from the Urban League of Metropolitan St. Louis, Inc., which will provide home visits, energy assistance support, budgetary education and information about energy conservation methods.

The one hundred customers that will participate in the program will be selected by the Urban League. All participating customers must be eligible for the Low-Income Home Energy Assistance Program (“LIHEAP”).

AmerenUE states that, after the participating customers are identified, AmerenUE will install a home display device in each customer’s residence. The device is capable of showing six pieces of information: (1) the amount of dollars remaining; (2) the cost of energy being used at that moment; (3) the dollar amount of energy used during the 24 hours prior to 12:00 a.m. of the day the display is accessed; (4) the cost of energy used during the past 30 days; (5) the dollar amount of the most recent card entered into the device; and, (6) the cost per kWh of energy purchased. AmerenUE states that the word “buy” will flash when the device calculates that there is less than four days of usage available.

The pre-paid cards can be purchased at a "pay station" (a machine that is similar to an ATM) located in Fairview Heights, Illinois, that is accessible 24 hours a day. The pay station will accept checks, money orders and cash.

AmerenUE's statement indicates that during the period between November 1 to March 31 the pre-paid cards will allow a customer to consume a limited amount of energy that exceeds the amount for which the customer has paid. The card will track the amount of energy used, and the costs will be paid by the customer at the first transaction after March 31.

AmerenUE states that several benefits are available for participating customers. Perhaps the primary benefit is that all or part of old debts will be forgiven. Specifically, for each six months that a customer participates in the program, 25% of the customer's past debts will be forgiven. A customer who remains in the program for the program's two-year duration will have 100% of its past debts forgiven by AmerenUE. Through their participation, customers may become more aware of their energy usage and the importance of budgeting for energy consumption, as well as for other expenses.

AmerenUE states that the program may result in benefits for energy assistance agencies. AmerenUE anticipates that a successful program will free up money for additional clients that otherwise might have been spent on costs that do not provide a direct kWh benefit for customers.

Table 8: Pay As You Go Program

PAY AS YOU GO PROGRAM (AMERENUE)			
Program Type / Effective Dates	**Program Objectives**	**Eligible Customers / Participation Incentives**	**Program Results / Expenditures**
Billing program began September 1999. The program has an expected two-year duration.	To evaluate customers' acceptance of a "pay as you go" payment option. The program will also evaluate the "pay as you go" plan as a customer choice for energy conservation, budgeting, and personal responsibility.	One hundred LIHEAP-eligible customers in the East St. Louis Metro area. Customers receive 25% arrearage reduction for every six months of program participation.	Program began September 1999. Total budgeted expenditures are $257, 833.

V. Conclusion

This Report has examined the seven experimental programs initiated by AmerenCIPS, AmerenUE and ComEd, the Illinois electric utilities operating programs during 1999 under Section 16-106 of the Act.

Each of the utilities operated programs in response to summer reliability problems (ComEd's Load Curtailment and Generated Energy Procurement Pricing Experiment and the Ameren companies' Voluntary Curtailment Billing Experiments). ComEd also operated programs targeted at selected customer groups (the Consolidated Billing, Affinity Group Billing and Student Power 2000 Power Pricing Experiments). AmerenUE implemented a program to gauge low-income customers' reaction to a new bill payment option (the Pay As You Go Program).

In the Conclusion of this Report, the Commission presents comments about issues relevant to these programs.

A. Effect on the Electric Rates of Non-participants

Each of the programs under Section 16-106 have offered rate discounts or other inducements to the typically small group of customers participating in the program. For most programs, the discounts have ranged from about 5% to 15%. These discounts likely will not have an impact on the future electric rates by customers not participating in the programs because of the provisions in the Act that allow the Commission, when it sets base electric rates, to exclude the expenditures on experimental programs undertaken pursuant to Section 16-106.[10]

B. Costs and Benefits of the Experimental Programs

1. ComEd's and Ameren's load curtailment programs

The offering of rate discounts gives rise to the question of whether the rate discounts are commensurate with the expected benefits of the programs; that is, whether the discounts offered to eligible customers are such that the discount encouraged maximum participation while minimizing costs. For the load curtailment programs initiated by ComEd and Ameren, the Commission has no reason to believe that the temporary rate discounts associated with the programs were high compared to the expected benefits that would be derived from the preservation of reliability. As discussed below, the Commission is more doubtful that some of the non-load curtailment programs are cost-beneficial.

[10] See Section 16-111(d) of the Act.

2. The Consolidated Billing, Affinity Group Billing and Student Power 2000 Pricing Experiments

a) The Consolidated Billing Experiment

ComEd has not yet made a judgment as to whether the costs of the Consolidated Billing Experiment are commensurate with the benefits that have been and will be achieved from the program.[11] In its investigation of the Rider CB program, the Commission found that the informational benefits achievable through the program justified the continued existence of the program.[12] Since the purpose of the Consolidated Billing Experiment is the same as the purpose of Rider CB, the Commission believes that the relatively small (approximately 5-7.5%) savings achieved by participating customers is probably not excessive relative to the benefits of the program.

b) Student Power 2000 Pricing Experiment

The discount provided to the 1,531 school districts currently participating in the program is about 10%. In return for providing the discount, it appears that the only benefits that ComEd will receive is information that will be useful to ComEd when the school districts are eligible to purchase power from suppliers other than ComEd. The Commission, therefore, is doubtful that the costs associated with the Student Power 2000 Pricing Experiment are or will be equal to the benefits achievable from the program.

c) The Affinity Group Billing Experiment

While there may be short-term benefits related to reliability, the primary future benefits that ComEd may obtain from the Affinity program are mainly marketing advantages. Through the Affinity program ComEd will learn whether, and to what extent, certain commercial customers are willing to consider seriously accepting an offer of a discounted electric rate. The Commission is doubtful that such information, while useful, is worth its acquisition cost.

C. Are the Section 16-106 Programs "Experiments?"

A question that arises when a utility implements an experimental program is whether the programs truly are "experimental," as that term is used in Section 16-106. Or, put another way, the question is whether the experiments initiated by ComEd and Ameren were the type of programs contemplated by Section 16-106.

1. Load Curtailment Programs

The load curtailment programs do not seem to be the type of programs envisioned by Section 16-106. While the programs served a useful and important public purpose, the Commission believes that the programs are "experimental" only in the very loose sense

[11] ComEd Report on Pricing and Billing Experiments, p. II.2.8.
[12] Commission Order, Docket 96-0485, p. 34.

of the word. Rather than experiments, as one would ordinarily use that term, the programs were apparently implemented as a convenient means to help ensure that the Company could maintain a reliable amount of electric supply during peak usage periods.

2. The Consolidated Billing, Affinity Group Billing and Student Power 2000 Pricing Experiments

In its investigation of Rider CB, the Commission found that the Rider CB program would provide useful information, even though the experimental procedure used in the program might not be the procedure typically used in scientific experiments. The Commission has the same conclusion about the successor program to Rider CB, the Consolidated Billing Experiment.

3. AmerenUE's Pay As You Go Program

The Commission has no doubt that AmerenUE's Pay As You Go Program is the type of experimental program envisioned by Section 16-106. The program is designed to determine whether customers will remain with an experimental program for a sufficient amount of time to enable the customers to erase their past debts with AmerenUE. The Commission notes, however, that the information supplied by AmerenUE to the Commission does not indicate how the Company will determine whether the program should continue after its initial two-year duration.

D. Effects on Competition

In determining whether there may be harmful effects on competition from an experimental program, one should consider the effect of the program on two markets. One market is the market in which the customers participating in the programs sell products. The second market is the electricity market in which program participants themselves are customers.

1. The Load Curtailment Programs

There should be negligible, if any, effect on competition from the implementation of the load curtailment programs. Had the programs resulted in ongoing rate discounts, one might also be concerned about the long-term effects on competition, but the programs have only offered short-term rate discounts.

2. The Consolidated Billing and Affinity Group Billing Experiments

The discounts customers have obtained through their participation in the Consolidated Billing program and the Affinity program will provide an advantage over customers not receiving a discount until the end of 2006, when ComEd will no longer be permitted to assess transition charges to customers who switch to new suppliers.

Virtually all ComEd customers who switch to new suppliers, program participants and non-participants alike, will pay transition charges to ComEd. However, the transition charges assessed to program participants who switch suppliers will be lower than the charges assessed to similar types of customers who are not participating in the experimental program. The amount of the difference between the sets of transition charges will equal the amount of the discount program participants obtained through their participation in the programs. In essence, even though customers may end their participation in either of the programs, or the programs may terminate by the end of 2006, [13] program participants will still receive a discount on their total electric bills until the end of 2006 that likely will not be obtained by non-participants.

It is uncertain as to whether the advantage is large enough to significantly disturb the market in which Consolidated Billing or Affinity program customers compete. As noted earlier, the advantage program participants have over customers non-participants is on the order of 0.5% of operating costs.[14]

The information ComEd continues to learn about the customers participating in the Consolidated Billing Experiment will help it to retain the customers, if it desires to do so, when those customers become eligible to choose new suppliers. This advantage is derived from the knowledge gained from the many contacts with the customers through the program. Such knowledge may be difficult for new suppliers to obtain.

3. Student Power 2000 Pricing Experiments

The school districts participating in the Student Power 2000 Power Pricing Experiment do not compete against other school districts. However, the knowledge gained from the program may assist ComEd in retaining the school districts as customers when the school districts are eligible to choose new suppliers. On the other hand, the fact that ComEd has a marketing advantage over other suppliers in the school district market will be unlikely to discourage suppliers from entering the Illinois electric market.

E. Recommendations for Ongoing Section 16-106 programs

The Commission is concerned about the application of the experimental programs to services that contain elements of natural monopoly, such as transmission and distribution services. The General Assembly has made it clear that "delivery services" shall be regulated in a manner similar to traditional regulation. This includes the prohibition on providing those services in an unduly discriminatory manner.

There are sound theoretical reasons why monopoly services, which can only be provided by the incumbent utility, are required by law to remain regulated. For an

[13] ComEd has notified the Commission that this program will terminate in July 2001.
[14] For example, if the discount provided to a program participant is 10%, the cost advantage would be 0.032 * 0.10 = 0.32% of operating costs.

alternative supplier to provide a final product, the supplier (or its customers) will be required to obtain the monopoly transmission and distribution services from the incumbent utility under the utility's delivery services tariff. These basic essential services cannot generally be duplicated cost-effectively by an alternative supplier. As a result, an alternative supplier's customers will be forced to obtain delivery services under regulated prices, terms and conditions.

In contrast, Section 16-106 allows the incumbent electric utilities to provide delivery services to customers taking service under an experimental program at unregulated prices, terms and conditions. An alternative supplier does not have such flexibility. Thus, these programs could be used as a means to compete against alternative suppliers on terms that the incumbent knows a competitor cannot meet.

In light of the potential problem that utilities may discriminate through price and non-price means in the provision of monopoly services, the Commission recommends that the General Assembly consider requiring utilities that offer Section 16-106 programs to customers or customer classes eligible for delivery services, to provide the "delivery services" portion of such programs under the same terms, conditions and rates as the applicable delivery services tariff. There are three underlying reasons for this recommendation. First, this approach would further the cause of promoting competition in the Illinois energy services market which is the stated intention of the Act as indicated in Section 16-101A(d). By eliminating the ability of a utility to act in a potentially anti-competitive manner, the General Assembly can be confident that the flexibility that is provided to the incumbent under Section 16-106 will not impair the burgeoning competitive market.

Second, this solution comports with the General Assembly's intention that "delivery services shall not be a contract service until such a service is declared competitive." 220 ILCS 5/16-102. Last, while the Commission recognizes that a utility could "lock-in" a customer group prior to that group becoming eligible for open access, there appears to be some reluctance on the part of customers to join these programs. The Commission is more concerned that these programs could be misused as a last-ditch defensive move on the part of the incumbents rather than a general pricing practice. Thus, it would be appropriate to apply this recommendation to Section 16-106 programs that extend beyond the date at which a customer becomes eligible for open access.

The Commission specifically notes that this recommendation applies solely to programs under Section 16-106 as currently understood by the Commission and must not be interpreted to reflect any determination by the Commission about its authority to require a utility to provide bundled energy services to its own customers using the applicable delivery services tariffs.